

IN THE CLAIMS:

1-11. (Previously Canceled)

12. (Previously Withdrawn) A semiconductor device comprising:
a semiconductor layer over a substrate, said semiconductor layer comprising a lightly doped region adjacent to a channel forming region in said semiconductor layer; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a tungsten film, a metallic compound film having a tungsten compound as its main constituent, or a metallic alloy film having a tungsten alloy as its main constituent, wherein a taper angle α of said gate electrode is in a range from 5° to 85°.

13. (Previously Withdrawn) The semiconductor device according to claim 12, wherein said semiconductor device is an active matrix type liquid crystal display device.

14. (Previously Withdrawn) The semiconductor device according to claim 12, wherein said semiconductor device is an EL display device.

15. (Previously Withdrawn) The semiconductor device according to claim 12, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

16-40. (Previously Canceled)

41. (Previously Withdrawn) The semiconductor device according to claim 12, wherein said gate electrode is located over said semiconductor layer.

42. (Previously Withdrawn) The semiconductor device according to claim 12, wherein said gate electrode has an electrical resistivity of $20 \mu\Omega\cdot\text{cm}$ or less.

43. (Currently Amended) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, and

wherein a lower surface of said first conductive layer is in contact with the gate insulating film.

44. (Previously Added) The semiconductor device according to claim 43, wherein said gate electrode is located over said semiconductor layer.

45. (Previously Amended) The semiconductor device according to claim 43, wherein said gate electrode has an electrical resistivity of $20 \mu\Omega\cdot\text{cm}$ or less.

46. (Previously Added) The semiconductor device according to claim 43, wherein said semiconductor device is an active matrix type liquid crystal display device.

47. (Previously Added) The semiconductor device according to claim 43, wherein said semiconductor device is an EL display device.

48. (Previously Added) The semiconductor device according to claim 43, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

49. (Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, and

wherein a lower surface of said first conductive layer is in contact with the gate insulating film.

50. (Previously Added) The semiconductor device according to claim 49, wherein said gate electrode is located over said semiconductor layer.

51. (Previously Amended) The semiconductor device according to claim 49, wherein said gate electrode has an electrical resistivity of $20 \mu\Omega\cdot\text{cm}$ or less.

52. (Previously Added) The semiconductor device according to claim 49, wherein said semiconductor device is an active matrix type liquid crystal display device.

53. (Previously Added) The semiconductor device according to claim 49, wherein said semiconductor device is an EL display device.

54. (Previously Added) The semiconductor device according to claim 49, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

55. (Previously Withdrawn) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a first conductive layer comprising tungsten nitride which surrounds a second conductive layer comprising tungsten.

56. (Previously Withdrawn) The semiconductor device according to claim 55, wherein said gate electrode is located over said semiconductor layer.

57. (Previously Withdrawn) The semiconductor device according to claim 55, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

58. (Previously Withdrawn) The semiconductor device according to claim 55, wherein said semiconductor device is an active matrix type liquid crystal display device.

59. (Previously Withdrawn) The semiconductor device according to claim 55, wherein said semiconductor device is an EL display device.

60. (Previously Withdrawn) The semiconductor device according to claim 55, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

61. (Previously Withdrawn) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, and
wherein said first conductive layer has a taper angle of between 5° and 85° .

62. (Previously Withdrawn) The semiconductor device according to claim 61, wherein said gate electrode is located over said semiconductor layer.

63. (Previously Withdrawn) The semiconductor device according to claim 61, wherein said gate electrode has an electrical resistivity of $20 \mu\Omega\cdot\text{cm}$ or less.

64. (Previously Withdrawn) The semiconductor device according to claim 61, wherein said semiconductor device is an active matrix type liquid crystal display device.

65. (Previously Withdrawn) The semiconductor device according to claim 61, wherein said semiconductor device is an EL display device.

66. (Previously Withdrawn) The semiconductor device according to claim 61, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

67. (Previously Withdrawn) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, and

wherein said first conductive layer has a taper angle of between 5 and 85°.

68. (Previously Withdrawn) The semiconductor device according to claim 67, wherein said gate electrode is located over said semiconductor layer.

69. (Previously Withdrawn) The semiconductor device according to claim 67, wherein said gate electrode has an electrical resistivity of 20 $\mu\Omega\cdot\text{cm}$ or less.

70. (Previously Withdrawn) The semiconductor device according to claim 67, wherein said semiconductor device is an active matrix type liquid crystal display device.

71. (Previously Withdrawn) The semiconductor device according to claim 67, wherein said semiconductor device is an EL display device.

72. (Previously Withdrawn) The semiconductor device according to claim 67, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

73. (Previously Withdrawn) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride which surrounds a second conductive layer comprising tungsten, and

wherein said first conductive layer has a taper angle of between 5 and 85°.

74. (Previously Withdrawn) The semiconductor device according to claim 73, wherein said gate electrode is located over said semiconductor layer.

75. (Previously Withdrawn) The semiconductor device according to claim 73, wherein said gate electrode has an electrical resistivity of 20 $\mu\Omega\cdot\text{cm}$ or less.

76. (Previously Withdrawn) The semiconductor device according to claim 73, wherein said semiconductor device is an active matrix type liquid crystal display device.

77. (Previously Withdrawn) The semiconductor device according to claim 73, wherein said semiconductor device is an EL display device.

78. (Previously Withdrawn) The semiconductor device according to claim 73, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.--

79. (Currently Amended) A semiconductor device comprising:
a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a lower surface of said first conductive layer is in contact with the gate insulating film, and wherein at least said first conductive layer has a tapered cross section.

80. (Previously Added) The semiconductor device according to claim 79, wherein said gate electrode is located over said semiconductor layer.

81. (Previously Added) The semiconductor device according to claim 79, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

82. (Previously Added) The semiconductor device according to claim 79, wherein said semiconductor device is an active matrix type liquid crystal display device.

83. (Previously Added) The semiconductor device according to claim 79, wherein said semiconductor device is an EL display device.

84. (Previously Added) The semiconductor device according to claim 79, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

85. (Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a lower surface of said first conductive layer is in contact with the gate insulating film, and wherein at least said first conductive layer has a tapered cross section.

86. (Previously Added) The semiconductor device according to claim 85, wherein said gate electrode is located over said semiconductor layer.

87. (Previously Added) The semiconductor device according to claim 85, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

88. (Previously Added) The semiconductor device according to claim 85, wherein said semiconductor device is an active matrix type liquid crystal display device.

89. (Previously Added) The semiconductor device according to claim 85, wherein said semiconductor device is an EL display device.

90. (Previously Added) The semiconductor device according to claim 85, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

91. (Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a lower surface of said first conductive layer is in contact with the gate insulating film, and wherein said second conductive layer has a thickness between 200 and 400 nm.

92. (Previously Added) The semiconductor device according to claim 91, wherein said gate electrode is located over said semiconductor layer.

93. (Previously Added) The semiconductor device according to claim 91, wherein said gate electrode has an electrical resistivity of 20 $\mu\Omega\cdot\text{cm}$ or less.

94. (Previously Added) The semiconductor device according to claim 91, wherein said semiconductor device is an active matrix type liquid crystal display device.

95. (Previously Added) The semiconductor device according to claim 91, wherein said semiconductor device is an EL display device.

96. (Previously Added) The semiconductor device according to claim 91, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

97. (Currently Amended) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a lower surface of said first conductive layer is in contact with the gate insulating film, and wherein said second conductive layer has a thickness between 200 and 400 nm.

98. (Previously Added) The semiconductor device according to claim 97, wherein said gate electrode is located over said semiconductor layer.

99. (Previously Added) The semiconductor device according to claim 97, wherein said gate electrode has an electrical resistivity of 20 $\mu\Omega\cdot\text{cm}$ or less.

100. (Previously Added) The semiconductor device according to claim 97, wherein said semiconductor device is an active matrix type liquid crystal display device.

101. (Previously Added) The semiconductor device according to claim 97, wherein said semiconductor device is an EL display device.

102. (Previously Added) The semiconductor device according to claim 97, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.